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Wilk KE. Commentary on "Electromyographic activity of selected shoulder muscles in commonly used therapeutic exercises." 1993;73:679–681.

Wilker L: See Donohoe E

Williams M, McKenzie RA. Commentary on "Evidence for use of an extension-mobilization category in acute low back syndrome: a prescriptive validation pilot study." 1993;73:223–224.

Williams M, McKenzie RA. Letter to the editor [RE: Evidence for use of an extension-mobilization category in acute low back syndrome: a prescriptive validation pilot study]. 1993;73:550–551.

Williams R, Binkley J, Bloch R, et al. Reliability of the modified-modified Schöber and double inclinometer methods for measuring lumbar flexion and extension. 1993;73:26–37.

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Yack HJ, Paoni L. Commentary on "Relationships among cane fitting, function, and falls." 1993;73:501–502.

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American Physical Therapy Association

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Clinical use of neuromuscular electrical stimulation for children with cerebral palsy, part 2: upper extremity. Carmick J. 1993;73:514–522.

▶Commentary. Cech DJ. 1993;73:523–524.

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▶Commentary. Sahrmann S. 1993;73:578–579.

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▶Erratum. 1993;73:809.

Clinical use of neuromuscular electrical stimulation for children with cerebral palsy, part 2: upper extremity. Carmick J. 1993;73:514–522.

▶Commentary. Cech DJ. 1993;73:523–524.

▶Commentary. McEwen IR. 1993;73:524–525.

▶Response. 1993;73:526–527.

▶Erratum. 1993;73:809.

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▶[Commentary. Delitto A. 1992;72:807–808.]

▶[Response. 1992;72:808–809.]

▶Correction. 1993;73:123.

[Letter to the editor. [RE: The "TENS issue"—What can we learn?]. Mendel FC, Fish DR. 1991;71:623–624.]

Letter to the editor. [RE: TENS—an international perspective.]. Jenkner FL. 1993;73:47.

▶Response. 1993;73:48.

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▶Commentary. Wilk KE. 1993;73:679–681.

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▶Response. 1993;73:298–299.

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▶Response. 1993;73:502–504.

▶Erratum. 1993;73:711.

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[Agonist and antagonist activity during voluntary upper-limb movement in patients with stroke. Gowland C, deBruin H, Basmajian JV, et al.. 1992;72:624–633.]

▶Letter to the editor. Panturin E. 1993;73:403.

▶Response. 1993;73:403.

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▶Commentary. Winstein CJ, Pohl PS. 1993;73:383–384.

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▶Response. 1993;73:69–70.

▶Correction. 1993;73:330.

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▶Commentary. Brown M. 1993;73:444–445.

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The use of a mechanical model to describe the stiffness and damping characteristics of the knee joint in healthy adults. Oatis CA. 1993;73:740–749.

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Effects of prenatal alcohol exposure on neuromotor and cognitive development during early childhood: A series of case reports. Harris SR, Osborn JA, Weinberg J, et al. 1993;73:608–617.

Fetal alcohol syndrome: review of the literature with implications for physical therapists. Osborn JA, Harris SR, Weinberg J. 1993;73:599–607.

Motor unit recruitment and the gradation of muscle force. Clamann HP. 1993;73:830–843.

Reliability of the Fugl-Meyer Assessment for testing motor performance in patients following stroke. Sanford J, Moreland J, Swanson LR, et al. 1993;73:447–454.

Validity of goal attainment scaling in infants with motor delays. Palisano RJ. 1993;73:651–658.

▶Commentary. Gowland C. 1993;73:658–659.

▶Response. 1993;73:659–660.

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▶Commentary. Shea AM. 1993;73:179–181.

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Age differences in movement patterns used to rise from a bed in subjects in the third through fifth decades of age. Ford-Smith CD, VanSant AF. 1993;73:300–309.

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Knee kinematics and kinetics during locomotor activities of daily living in subjects with knee arthroplasty and in healthy control subjects. Jevsevar DS, Riley PO, Hodge WA, Krebs DE. 1993;73:229–239.

▶Commentary. Rodgers MM. 1993;73:240–241.

▶Response. 1993;73:241–242.

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The effect of marker placement deviations on spinal range of motion determined by video motion analysis. O'Connor PD, Robinson ME, Shirley FR, Mac Millan M. 1993;73:478–483.

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Combined use of surface electromyography and ^{31}P-NMR spectroscopy for the study of muscle disorders. Roy SH. 1993;73:897–901.

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Electromyographic activity of selected shoulder muscles in commonly used therapeutic exercises. Ballantyne BT, O'Hare SJ, Paschall JL, et al. 1993;73:668–677.

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▶Commentary. Wilk KE. 1993;73:679–681.

▶Response. 1993;73:681–682.

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▶[Response. 1992;72:271–272.]

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▶[Response. 1992;72:540–541.]

▶[Letter to the editor. Miller DJ. 1992;72:675.]

▶[Commentator response. 1992;72:676.]

▶[Response. 1992;72:676.]

▶[Letter to the editor. Rivard J, Ghandour Y, Inglish S, et al. 1992;72:676–678.]

▶[Response. 1992;72:678–679.]

▶Letter to the editor. Deyo RA. 1993;73:48.

Evidence for use of an extension-mobilization category in acute low back syndrome: a prescriptive validation pilot study. Delitto A, Cibulka MT, Erhard RE, et al. 1993;73:216–222.

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▶Response. 1993;73:551.

▶Letter to the editor. Jones WD Jr. 1993;73:552–553.

▶Response. 1993;73:553–554.

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▶Response. 1993;73:69–70.

▶Correction. 1993;73:330.

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[A physical therapy model for the treatment of low back pain. DeRosa CP, Porterfield JA. 1992;72:261–269.]

▶[Commentary. Twomey LT. 1992;72:270–271.]

▶[Response. 1992;72:271–272.]

▶[Letter to the editor. Woodman R. 1992;72:540.]

▶[Response. 1992;72:540–541.]

▶[Letter to the editor. Miller DJ. 1992;72:675.]

▶[Commentator response. 1992;72:676.]

▶[Response. 1992;72:676.]

▶[Letter to the editor. Rivard J, Ghandour Y, Inglish S, et al. 1992;72:676–678.]

▶[Response. 1992;72:678–679.]

▶Letter to the editor. Deyo RA. 1993;73:48.

Diagnostic classification of patients with low back pain: report on a survey of physical therapy experts. Binkley J, Finch E, Hall J, et al. 1993;73:138–150.

▶Commentary. DeRosa CP. 1993;73:150–151.

▶Commentary. Beattie P. 1993;73:151–152.

▶Commentary. Roy SH. 1993;73:153–154.

▶Response. 1993;73:154–155.

▶Correction. 1993;73:330.

[Effect of variation in the burst and carrier frequency modes of neuromuscular electrical stimulation on pain perception of healthy subjects. Rooney JG, Currier DP, Nitz AJ. 1992;72:800–806.]

▶[Commentary. Delitto A. 1992;72:807–808.]

▶[Response. 1992;72:808–809.]

▶Correction. 1993;73:123.

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▶Commentary. Williams M, McKenzie RA. 1993;73:223–224.

▶Commentary. Farrell JP. 1993;73:224–226.

▶Response. 1993;73:226–228.

▶Letter to the editor. Williams M, McKenzie RA. 1993;73:550–551.

▶Letter to the editor. Jacob G. 1993;73:551.

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▶Commentary. Riolo L. 1993;73:783–785.

▶Response. 1993;73:786.

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[Goal attainment scaling as a measure of change in infants with motor delays. Palisano RJ, Haley SM, Brown DA. 1992;72:432–437.]

▶Letter to the editor. Maloney FP. 1993;73:123.

Validity of goal attainment scaling in infants with motor delays. Palisano RJ. 1993;73:651–658.

▶Commentary. Gowland C. 1993;73:658–659.

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▶Response. 1993;73:770.

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▶Commentary. Davis KD. 1993;73:758–759.

▶Commentary. DeMasi I. 1993;73:759–760.

▶Response. 1993;73:761.

Letter to the editor [RE: APTA Policy]. Knutson LM. 1993;73:632.

▶Response. Rothstein JM. 1993;73:632.

Letter to the editor. [RE: DPT controversy.] Deusinger SS, Deusinger RH, Minor SD, et al. 1993;73:329–330.

▶Response. 1993;73:330.

▶Letter to the editor. Paris SV. 1993;73:548–549.

▶Response. 1993;73:549–550.

▶Letter to the editor. Fearon FJ, Smith DD, Voight M, et al. 1993;73:550.

Perceptions of acute care physical therapy practice: issues for physical therapist preparation. Curtis KA, Martin T. 1993;73:581–594.

▶Commentary. Dunleavy JM. 1993;73:594–595.

▶Commentary. Kigin CM. 1993;73:595–596.

▶Commentary. Moffat M. 1993;73:596–597.

▶Response. 1993;73:598.

Predictors of physical therapy faculty job turnover. Radtka S. 1993;73:243–251.

▶Commentary. Domholdt E. 1993;73:251–252.

▶Response. 1993;73:252–253.

The impact of the prospective payment system: perceived changes in the nature of practice and clinical education. Emery MJ. 1993;73:11–22.

▶Commentary. Gwyer J. 1993;73:22–23.

▶Response. 1993;73:24–25.

Supportive personnel

Use of support personnel for physical therapy treatment. Bashi HL, Domholdt E. 1993;73:421–429.

▶Commentary. Basile VJ. 1993;73:429–431.

▶Commentary. Box OJ. 1993;73:431–432.

▶Commentary. Perry DW. 1993;73:432–433.

▶Commentary. Watts NT. 1993;73:433–435.

▶Response. 1993;73:435–436.

▶Letter to the editor. White DM. 1993;73:809.

Poliomyelitis

General

Motor unit populations in healthy and diseased muscles. McComas AJ, Galea V, de Bruin H. 1993;73:868–877.

Posture

General

Balance improvements in older women: effects of exercise training. Judge JO, Lindsey C, Underwood M, Winsemius D. 1993;73:254–262.

▶Commentary. Keshner EA. 1993;73:263–264.

▶Response. 1993;73:264–265.

Tests and measurements

A study of the Clinical Test of Sensory Interaction and Balance. Cohen H, Blatchly CA, Gombash LL. 1993;73:346–351.

▶Commentary. Di Fabio RP. 1993;73:351–353.

▶Response. 1993;73:353–354.

Converting Chattecx Balance System vertical reaction force measurements to center of pressure excursion measurements. Grabiner MD, Lundin TM, Feuerbach JW. 1993;73:316–319.

Test-retest reliability of two tiltboard tests in children. Broadstone BJ, Westcott SL, Deitz JC. 1993;73:618–625.

Professional-patient relations

Editor's note. Inappropriate patient sexual behaviors. Rothstein JM. 1993;73:738–739.

Experiences of student and practicing physical therapists with inappropriate patient sexual behavior. McComas J, Hébert C, Giacomin C, et al. 1993;73:762–768.

▶Commentary. Bruckner J. 1993;73:768–769.

▶Response. 1993;73:770.

The effects of an AIDS education program on the knowledge and attitudes of a physical therapy class. Held SL. 1993;73:156–164.

Publications and audiovisual materials

Letter to the editor [RE: APTA Policy]. Knutson LM. 1993;73:632.

▶Response. Rothstein JM. 1993;73:632.

Research

Alternative approaches to research in physical therapy: positivism and phenomenology. Shepard KF, Jensen GM, Schmoll BJ, et al. 1993;73:88–97.

▶Commentary. Mattingly C. 1993;73:98–100.

▶Response. 1993;73:100–101.

Diagnosis and treatment in physical therapy: an investigation of their relationship. Dekker J, van Baar ME, Curfs EC, Kerssens JJ. 1993;73:568–577.

▶Commentary. Guccione AA. 1993;73:577–578.

▶Commentary. Sahrmann S. 1993;73:578–579.

▶Response. 1993;73:579–580.

Measurement validity in physical therapy research. Sim J, Arnell P. 1993;73:102–110.

▶Commentary. Campbell SK. 1993;73:110–113.

▶Commentary. Goldsmith CH. 1993;73:113–114.

▶Commentary. Payton OD. 1993;73:114–115.

▶Response. 1993;73:115.

Using health-related quality of life measures in physical therapy outcomes research. Jette AM. 1993;73:528–537.

Skeletal muscle

Combined use of surface electromyography and ^{31}P-NMR spectroscopy for the study of muscle disorders. Roy SH. 1993;73:897–901.

Compartmentalization of muscles and their motor nuclei: the partitioning hypothesis. English AW, Wolf SL, Segal RL. 1993;73:857–867.

Editor's note. Muscle and more—it's all here. Rothstein JM. 1993;73:826–828.

Injury to skeletal muscle fibers during contractions: conditions of occurrence and prevention. Faulkner JA, Brooks SV, Opiteck JA. 1993;73:911–921.

Introduction: skeletal muscle. Binder-Macleod SA. 1993;73:829.

Motor unit populations in healthy and diseased muscles. McComas AJ, Galea V, de Bruin H. 1993;73:868–877.

Muscle fatigue: clinical implications for fatigue assessment and neuromuscular electrical stimulation. Binder-Macleod SA, Snyder-Mackler L. 1993;73:902–910.

Skeletal muscle mechanics: implications for rehabilitation. Lieber RI, Bodine-Fowler SC. 1993;73:844–856.

The role of skeletal muscle in glucose transport, glucose homeostasis, and insulin resistance: implications for physical therapy. Sinacore DR, Gulve EA. 1993;73:878–891.

Skin conditions

A comparison of photographic and transparency-based methods for measuring wound surface area. Griffin JW, Tolley EA, Tooms RE, et al. 1993;73:117–122.

Vacuum-compression therapy for the treatment of an ischemic ulcer. McCulloch JM Jr, Kemper CC. 1993;73:165–169.

Spinal cord dysfunction

Paraplegia

Implications of elbow arthrodesis for individuals with paraplegia. Young JH. 1993;73:194–201.

Tests and measurements

Functional

A longitudinal study of children with Down syndrome who experienced early intervention programming. Connolly BH, Morgan SB, Russell FF, Fulliton WL. 1993;73:170–179.

▶Commentary. Shea AM. 1993;73:179–181.

Converting Chattecx Balance System vertical reaction force measurements to center of pressure excursion measurements. Grabiner MD, Lundin TM, Feuerbach JW. 1993;73:316–319.

Cross-validation of bioelectrical impedance analysis of body composition in children and adolescents. Wu Y-T, Nielsen DH, Cassady SL, et al. 1993;73:320–328.

[Goal attainment scaling as a measure of change in infants with motor delays. Palisano RJ, Haley SM, Brown DA. 1992;72:432–437.]

▶Letter to the editor. Maloney FP. 1993;73:123.

Reliability of the modified-modified Schöber and double inclinometer methods for measuring lumbar flexion and extension. Williams R, Binkley J, Bloch R, et al. 1993;73:26–37.

Reliability of the scores for the finger-to-nose test in adults with traumatic brain injury. Swaine BR, Sullivan SJ. 1993;73:71–78.

The application of generalizability theory to reliability assessment: an illustration using isometric force measurements. Roebroeck ME, Harlaar J, Lankhorst GJ. 1993;73:386–395.

▶Commentary. Hayes KW. 1993;73:396–397.

▶Commentary. Matyas TA, Keating JL, Greenwood KM. 1993;73:397–399.

▶Response. 1993;73:400–401.

General

A comparison of photographic and transparency-based methods for measuring wound surface area. Griffin JW, Tolley EA, Tooms RE, et al. 1993;73:117–122.

Measurement validity in physical therapy research. Sim J, Arnell P. 1993;73:102–110.

▶Commentary. Campbell SK. 1993;73:110–113.

▶Commentary. Goldsmith CH. 1993;73:113–114.

▶Commentary. Payton OD. 1993;73:114–115.

▶Response. 1993;73:115.

Reliability and concurrent validity of the Metrecom for length measurements on inanimate objects. Norton BJ, Ellison JB. 1993;73:266–274.

Using health-related quality of life measures in physical therapy outcomes research. Jette AM. 1993;73:528–537.

Range of motion

Intrasubject reliability of spinal range of motion and velocity determined by video motion analysis. Robinson ME, O'Connor PD, Shirley FR, Mac Millan M. 1993;73:626–631.

The effect of marker placement deviations on spinal range of motion determined by video motion analysis. O'Connor PD, Robinson ME, Shirley FR, Mac Millan M. 1993;73:478–483.

Ultrasound

Letter to the editor. [RE: Cancer and ultrasound: a warning. Sicard-Rosenbaum L, Danoff J. 1993;73:404–406.

Upper extremity

Elbow

Implications of elbow arthrodesis for individuals with paraplegia. Young JH. 1993;73:194–201.

Reaction and movement times in patients with hemiparesis for unilateral and bilateral elbow flexion. Dickstein R, Hocherman S, Amdor G, Pillar T. 1993;73:374–380.

▶Commentary. Wolf SL. 1993;73:381–383.

▶Commentary. Winstein CJ, Pohl PS. 1993;73:383–384.

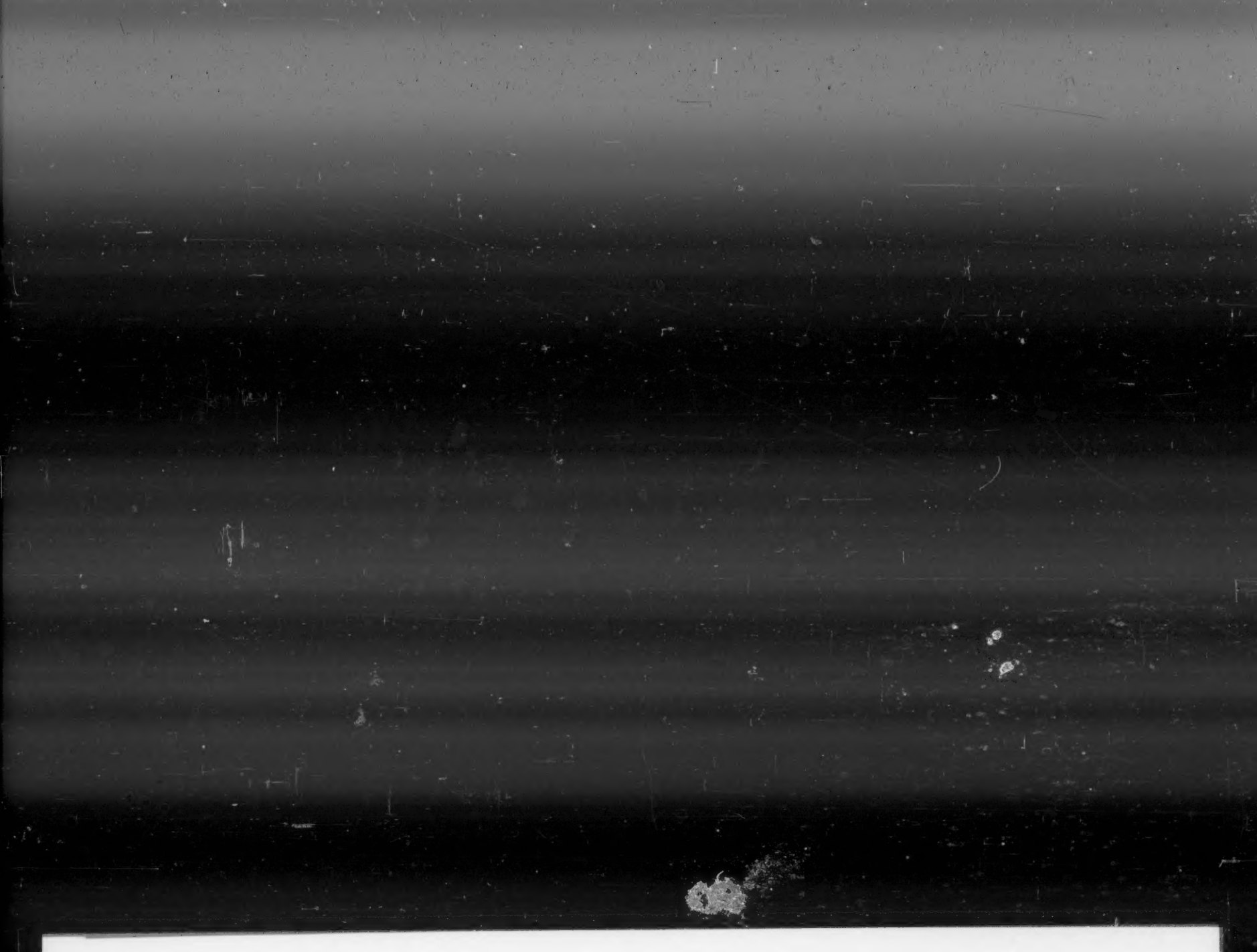
▶Response. 1993;73:385.

Vascular disease

Vacuum-compression therapy for the treatment of an ischemic ulcer. McCulloch JM Jr, Kemper CC. 1993;73:165–169.

Vestibular system

A study of the Clinical Test of Sensory Interaction and Balance. Cohen H, Blatchly CA, Gombash LL. 1993;73:346–351.

▶Commentary. Di Fabio RP. 1993;73:351–353.

▶Response. 1993;73:353–354.